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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

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EXAMINER

MACKEY, TERRENCE M

ART UNIT

PAPER NUMBER

1765

DATE MAILED: 12/18/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/935,569

Applicant(s)

HATA, MITSUAKI

Examiner

Terrence Mackey

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-14 is/are rejected.
- 7) ☒ Claim(s) 4-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on March 15, 2000. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on August 24, 2001, was filed after the mailing date of the application on August 21, 2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Objections***

Claims 4 - 7 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim is presented. See MPEP § 608.01(n). Accordingly, the claims 4 - 7 are not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 – 3 and 8 - 10 are rejected under 35 U.S.C. 102(a) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Koshiishi. Applicant discloses a method for removing desired portions of a film from a substrate by covering a portion of the substrate surface with a cover member having a top and supplying a solvent from the top of the cover member through a supply hole formed at a predetermined position in the cover member to remove desired portions of said film. Applicant discloses that a gap between the cover member and the substrate surface covered with said film is to be sized such that temperature distribution is not caused in said coating film under the influence of heat transfer from the cover member.

Koshiishi teaches a method and apparatus for removing a coating from a confined peripheral region of a substrate by covering the substrate with a guide member (55) that is spaced 1.65 millimeters from the substrate surface from which the coating film is to be unprocessed. Processing solution is introduced into a gap between the substrate surface to be processed and a peripheral portion of the guide member by spinning the guide member and substrate together about a substantially vertical axis which keeps the processing solution confined to the gap by surface tension to achieve removal of the coating on the outer region of the substrate. Koshiishi teaches the use of nylon rings (66) (column 11, lines 17-30) and also indicates that the guide member may have a pyramidal or dome shape (column 14, lines 38-42).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 – 14 are rejected under 35 U.S.C. 103(a) as obvious over Koshiishi in view of Hashimoto. Koshiishi teaches that the above method for removing a coating at a confined peripheral region of a substrate may be used for the removal of a spin-on glass and resist coatings such as typically used in photomask manufacture. Koshiishi does not teach the formation of a film having light shielding and/or phase shifting function for use in a photomask. Hashimoto teaches that a light shielding film for use with a phase shifting photomask may be a chromium film formed by sputter deposition.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the film removal method taught by Koshiishi in the manufacture of a phase shift photomask as taught by Hashimoto so that unwanted portions of a film would be removed in the manufacture of a photomask blank to prevent the subsequent contamination thereof by this unwanted material.

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**Conclusion**

Remaining references cited of interest to show the state of the art.

No claim is allowed.

Papers relating to this application may be submitted to Technology Sector x by facsimile transmission. Papers should be faxed to Crystal Plaza 3, Art Unit 1765, using fax number (703) 305-6357. All Technology Section 1 fax machines are available to receive transmissions 24 hrs/day, 7 days/wk. Please note that the faxing of such papers must conform to the Notice published in the Official Gazette, 1096 OG 30, (November 15, 1989).

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Terrence Mackey whose telephone number is (703) 305-5504. The Examiner can normally be reached Monday - Friday from 7:00 AM – 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Ben Uteck, can be reached at (703) 308-3836.

Any inquiry of a general nature or relating to the status of this application should be directed to the receptionist whose telephone number is (703) 308-0661.



ROBERT KUNEMUND  
PRIMARY EXAMINER